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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
10-045,239	10-26-2001	Robert S. Bosko	0006-0028	9918

7590 06-25-2003
Dennis Braswell
105 Soost Court
Mobile, AL 36608

EXAMINER

BUSHEY, CHARLES S

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 06-25-2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,239

Applicant(s)

BOSKO, ROBERT S.

Examiner

Scott Bushey

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-16 and 19-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-16 and 19-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1 ☐ Certified copies of the priority documents have been received.
- 2 ☐ Certified copies of the priority documents have been received in Application No. _____.
- 3 ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s): _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5, 8, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Page et al '149 taken together with Harris, Jr. and Voznick et al.

Page et al '149 (col. 4, lines 43-45, 61-64; col. 5, lines 43-64; col. 13, lines 24-49; col. 18, lines 9-10, 20, 36-38, 46-49) substantially disclose applicant's invention as recited by instant claims 1-3, 5, 8, 15, and 16, except for the treatment system for pretreating the water prior to carbonation being in the form of a reverse osmosis water treatment system, the RO treatment system further including a flexible bag reservoir. Applicant should note that the Page et al '149 reference clearly teaches carbonation of water using hydrophobic hollow fibers made of polypropylene. The reference further discloses mixing the carbonated water with a beverage syrup to form a finished drink, such as soda, which may be dispensed via a customer interface, i.e., taps in a soda fountain (col. 4, lines 61-64). The water used for the carbonated drink may be treated as discussed at col. 5, lines 58-64. Lastly, it is suggested by the reference to utilize the invention thereof to further carbonate a pre-carbonated beverage.

Harris, Jr. (Abstract; Fig. 1) discloses a beverage dispensing assembly, wherein water used to produce the final product is pretreated by a reverse osmosis water treatment system. The reference further discloses storing the treated water within a storage tank prior to final beverage

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preparation and dispensing thereof. It would have been obvious for an artisan at the time of the invention, to substitute the reverse osmosis water treatment system of Harris, Jr. for the water degassing pretreatment of Page et al '149, since such would remove any dangerous impurities from the water prior to its consumption by the end user.

Voznick et al (Figs. 4 and 5; Abstract; col. 1, line 60 through col. 2, line 16) teach the use of a flexible bag reservoir in combination with a reverse osmosis filtration device. Voznick et al specifically teach (col. 1, line 60 through col. 2, line 16) that use of a flexible bag reservoir in combination with a reverse osmosis filtration device provides for increased efficiency of the RO filter, as opposed to the use of a pressurized rigid storage tank. It would have been obvious for an artisan at the time of the invention, to utilize a flexible bag as the reservoir means for the reverse osmosis filter system of the apparatus as suggested by the combination of Page et al '149 and Harris, Jr., in view of the teaching by Voznick et al, since such would increase the filtration rate by the reverse osmosis system. Applicant should further note that with respect to the chiller of instant claim 5, it is notoriously well known within the art to chill the water being carbonated and to maintain the water at a chilled level throughout the process to insure the desired level of dissolved gas is maintained in solution, thereby providing a useable carbonated product beverage. Applicant may wish to consult LaRocco et al (col. 1, line 56 through col. 2, line 17), which is not utilized within this rejection, but is however referred to to demonstrate that it is well known within the art to chill the water throughout the carbonation process, including prior to carbonation, during the carbonating steps and up until the final product is mixed to form the completed beverage.

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3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the reference combination as applied to claims 1-3, 5, 8, 15, and 16 above, and further in view of Katou et al.

The reference combination as applied to claims 1-3, 5, 8, 15, and 16 above substantially disclose applicant's invention as recited by instant claim 4, except for the instance wherein the water is supplied through the fibers with the carbon dioxide outside of the fibers.

Katou et al (col. 3, lines 40-43; col. 7, lines 13-52) disclose the use of hydrophobic hollow fibers for the carbonation of water, wherein the water may be provided either internally or exterior to the fibers with like results. It would have been obvious for an artisan at the time of the invention, to utilize the hollow fiber membranes of the reference combination as applied to claims 1-3, 5, 8, 15, and 16 above, to carbonate water, wherein the water flows through the fibers, in view of Katou et al, since such would provide a more flexible apparatus capable of operating in differing manners as desired to achieve like results.

Applicant should note that Katou et al (col. 7, lines 40-52) clearly teaches that tube side water flow is desirable in the situation wherein "the apparatus has to cope with large changes in the flow rate of water produced", such as would be met within a soda fountain dispensing operation, wherein the water flow rate is constantly changing between batch production of individual beverages.

4. Claims 9-14, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the reference combination as applied to claims 1-3, 5, 8, 15, and 16 above, and further in view of LaRocco et al.

The reference combination as applied to claims 1-3, 5, 8, 15, and 16 above substantially disclose applicant's invention as recited by instant claims 9-14, 19, and 20, except for the

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provision that non-carbonated water may be dispensed from the apparatus and that there may be a pre-carbonation stage prior to the final carbonation. Page et al '149, the primary reference within the reference combination as applied to claims 1-3, 5, 8, 15, and 16 above does suggest further carbonating a previously finished carbonated beverage.

LaRocco et al (col. 5, lines 51-64) disclose a beverage dispensing assembly wherein there is provided means for delivering non-carbonated water to the dispensing means for producing non-carbonated finished beverages. LaRocco et al also disclose providing pre-carbonation of the water prior to the final carbonation stage for producing beverages that have increased final carbonation levels. It would have been obvious for an artisan at the time of the invention, to provide the reference combination as applied to claims 1-3, 5, 8, 15, and 16 above, with means for delivering non-carbonated water to the dispensing means, as well as pre-carbonated water to the final carbonation means for producing highly carbonated drinks, in view of LaRocco et al, since such would provide a single assembly capable of dispensing beverages of all desired carbonation levels, including non-carbonated beverages.

5. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Page et al '149 taken together with Katou et al.

Page et al '149, as applied above substantially disclose applicant's invention as recited by instant claims 21 and 22, except for the instance wherein the water is supplied through the fibers with the carbon dioxide outside of the fibers.

Katou et al (col. 3, lines 40-43; col. 7, lines 13-52) disclose the use of hydrophobic hollow fibers for the carbonation of water, wherein the water may be provided either internally or exterior to the fibers with like results. It would have been obvious for an artisan at the time of

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the invention, to utilize the hollow fiber membranes of Page et al to carbonate water, wherein the water flows through the fibers, in view of Katou et al. since such would provide a more flexible apparatus capable of operating in differing manners as desired to achieve like results.

Applicant should note that Katou et al (col. 7, lines 40-52) clearly teaches that tube side water flow is desirable in the situation wherein "the apparatus has to cope with large changes in the flow rate of water produced", such as would be met within a soda fountain dispensing operation, wherein the water flow rate is constantly changing between batch production of individual beverages.

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Page et al '149 taken together with Katou, and further in view of Harris, Jr.

Page et al '149 and Katou suggest applicant's invention as recited by instant claim 23, except for the treatment system for pretreating the water prior to carbonation being in the form of a reverse osmosis water treatment system.

Harris, Jr. (Abstract; Fig. 1) discloses a beverage dispensing assembly, wherein water used to produce the final product is pretreated by a reverse osmosis water treatment system. It would have been obvious for an artisan at the time of the invention, to substitute the reverse osmosis water treatment system of Harris, Jr. for the water degassing pretreatment of the primary reference combination, as applied to claims 21 and 22 above, since such would remove any dangerous impurities from the water prior to its consumption by the end user.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over the reference combination as applied to claim 21 above, and further in view of LaRocco et al.

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The reference combination as applied to claim 21 above substantially disclose applicant's invention as recited by instant claim 24, except for the provision that non-carbonated water may be dispensed from the apparatus.

LaRocco et al (col. 5, lines 51-64) disclose a beverage dispensing assembly wherein there is provided means for delivering non-carbonated water to the dispensing means for producing non-carbonated finished beverages. It would have been obvious for an artisan at the time of the invention, to provide reference combination as applied to claim 21 above, with means for delivering non-carbonated water to the dispensing means, in view of LaRocco et al, since such would provide a single assembly capable of dispensing beverages of all desired carbonation levels, including non-carbonated beverages.

Response to Arguments

8. Applicant's arguments with respect to claims 1-5, 8-16, and 19-24 have been considered but are moot in view of the new grounds of rejection.

Applicant should note that the rejection statements have been written to specifically address applicant's remarks regarding the reference combinations as applied previously and herein.

Conclusion

9. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is (703) 308-3581. The examiner can normally be reached on Monday-Thursday 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Simmons can be reached on (703) 308-1972. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Scott Bushey
Primary Examiner
Art Unit 1724


6-23-03

csb
June 23, 2003